

Proposed Amendments

IN THE CLAIMS:

The following is a complete listing of the claims. Please amend the claims as follows:

1. **(Currently Amended)** A damper having an adjustable spring rate, comprising:
a piston having an axis, an outer surface, and opposing ends;
a housing;

elastomeric seals in sealing contact with the outer surface of the piston, the seals being coaxial with the piston and limiting movement of the piston to a path along the axis of the piston, the seals also defining fluid chambers adjacent the ends of the piston, the seals also being fixed to the housing;

a primary passage communicating extending through the piston from one end to the opposing end of the piston, the primary passage providing means for fluid to pass between the fluid chambers; and

a selectively switchable valve disposed within the piston and in fluid communication with the fluid passing through the primary passage, the selectively switchable valve being adapted for controlling a flow of fluid from one of the chambers to another of the chambers through the primary passage, such that when the selectively switchable valve is open, the flow of fluid through the primary passage is not resisted by the selectively switchable valve in either direction; further, when the selectively switchable valve is closed, the flow of fluid through the primary passage is restricted in both directions by the selectively switchable valve; and wherein

when the flow of fluid through the primary passage is permitted, movement of the piston is resisted by a first spring rate due-to-a-shear force required to cause shear deflection of the seals; and

when the flow of fluid through the primary passage is restricted, movement of the piston is resisted by a second spring rate due-to-a-fluid-force required to cause bulging deflection of the seals.

2. **(Original)** The damper according to claim 1, wherein the elastomeric seals are formed of layers of an elastomeric material and a rigid, non-elastomeric material.

3. **(Previously Presented)** The damper according to claim 1, wherein the switchable valve is located within the primary passage.
4. **(Previously Presented)** The damper according to claim 1, wherein the switchable valve is electrically operated.
5. **(Original)** The damper according to claim 1, wherein the primary passage is located within the piston.
6. **(Currently Amended)** The damper according to claim 1, further comprising:
a secondary passage communicating extending through the piston from one end to the opposing end of the piston, the secondary passage providing means for fluid to pass between the fluid chambers.
7. **(Canceled).**
8. **(Currently Amended)** The damper according to claim 1, further comprising:
a bypass passage extending through the piston from one end to the opposing end of the piston, the bypass passage providing means for limiting the pressure imbalance between the fluid chambers.
9. **(Canceled).**
10. **(Original)** The damper according to claim 8, further comprising:
a bypass valve located within the bypass passage.
11. **(Currently Amended)** A damper providing for selection between at least two spring rates, the damper providing:
a piston having an axis, an outer surface, and opposing ends;
a housing;

elastomeric seals in sealing contact with the outer surface of the piston, the seals being coaxial with the piston and limiting movement of the piston to a path along the axis of the piston, the seals also defining fluid chambers adjacent the ends of the piston, the seals also being fixed to the housing;

a primary passage communicating extending through the piston from one end to the opposing end of the piston, the primary passage providing means for fluid to pass between the fluid chambers;

a secondary passage communicating extending through the piston from one end to the opposing end of the piston, the secondary passage providing means for fluid to pass between the fluid chambers; and

a selectively switchable valve disposed within the piston and in fluid communication with the fluid passing through the primary passage, the selectively switchable valve being adapted for controlling a flow of fluid from one of the chambers to another of the chambers through the primary passage, such that when the selectively switchable valve is open, the flow of fluid through the primary passage is not resisted by the selectively switchable valve in either direction; further, when the selectively switchable valve is closed, the flow of fluid through the primary passage is restricted in both directions by the selectively switchable valve; and wherein

when the flow of fluid through the primary passage is permitted, movement of the piston is resisted by a first spring rate due-to-a-shear-force required to cause shear deflection of the seals; and

when the flow of fluid through the primary passage is restricted, movement of the piston is resisted by a second spring rate due-to-a-fluid-force-required-to cause bulging deflection of the seals.

12. **(Original)** The damper according to claim 11, wherein the elastomeric seals are formed of layers of an elastomeric material and a rigid, non-elastomeric material.

13. **(Previously Presented)** The damper according to claim 11, wherein the switchable valve is located within the primary passage.

14. **(Previously Presented)** The damper according to claim 11, wherein the switchable valve is electrically operated.

15. **(Canceled).**

16. **(Canceled).**

17. **(Original)** The damper according to claim 11, further comprising:
a bypass passage extending through the piston from one end to the opposing end of the piston, the bypass passage providing means for limiting the pressure imbalance between the fluid chambers.

18. **(Canceled).**

19. **(Original)** The damper according to claim 17, further comprising:
a bypass valve located within the bypass passage.

20. **(Original)** A method for providing multiple spring rates within a damper, the method comprising the steps of:

sealingly engaging opposite ends of a piston with elastomeric seals to form fluid chambers;

communicating the fluid chambers with a passage extending through the piston from one end to the opposing end of the piston, the passage providing means for fluid to pass between;

selectively controlling an amount of fluid flow through the passage, such that movement of the piston is resisted by a total spring rate, which is the sum of a first spring rate due to a shear force required to cause shear deflection of the seals and a second spring rate due to a force required to cause bulging deflection of the seals by fluid pressure induced by the movement of the piston.